

A 4-year-old girl with a rash and joint pain

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QUESTION: A 4-year-old girl is brought to the doctor because of a rash and joint pain. Nine days earlier, the patient was seen for an upper respiratory infection and was given trimethoprim/sulfamethoxazole for presumed sinusitis. Two days prior to the visit, the mother called the on-call physician and explained that her daughter was developing a rash. The trimethoprim/sulfamethoxazole was stopped and the following night the child developed pain and swelling in her ankles, wrists, and hands. The child complained that her legs hurt and that it hurt her to walk. She had no abdominal pain.

In the office, the physical exam revealed the lesions seen in Figures 1 to 4. The young girl had an obvious rash on her face but did not appear toxic. She was communicative and friendly. She walked with some discomfort. She had a low-grade temperature of 37.7°C. Further exam revealed a rash on her trunk, buttocks, arms, legs, and feet. The primary morphology showed urticarial wheals and some target lesions (Figures 2 and 3). Swelling of both ankles with a purple discoloration was suggestive of purpura (Figure 4). Some swelling of the wrists and hands was also noted. The remainder of the physical exam was normal. Urinalysis showed trace protein and no blood.

What is the diagnosis and treatment for this condition?

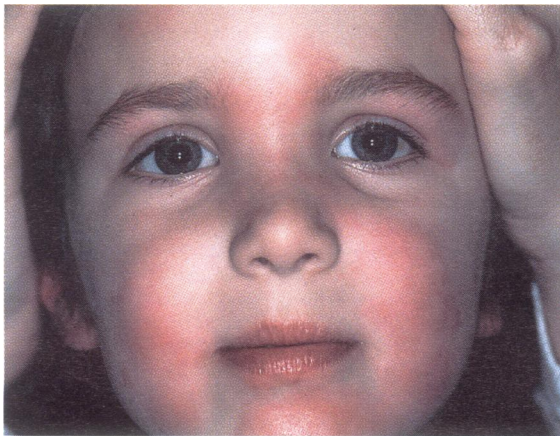


Figure 1 Face



Figure 2 Flank



Figure 3 Front



Figure 4 Ankles

ANSWER: This young girl has Henoch-Schonlein purpura. Henoch-Schonlein purpura is characterized by a triad of palpable purpura, abdominal pain or renal involvement, and arthritis. This patient had the classic urticarial wheals and palpable purpura. Target lesions may also be seen in Henoch-Schonlein purpura. The patient had joint involvement with painful and swollen ankles and wrists. The ankles and knees are most frequently affected.¹ In this case, the patient did not have abdominal pain. Up to 65% of patients have colicky abdominal pain that may be severe and associated with vomiting.¹

Renal involvement is the most serious sequela of Henoch-Schonlein purpura; hematuria is the most common manifestation of this renal involvement. Ten to 50 percent of patients may exhibit renal involvement and 1% may go on to chronic renal failure.² Our young patient had no hematuria and the trace proteinuria was not significant.

Henoch-Schonlein purpura is an autoimmune hypersensitivity vasculitis that occurs with a peak incidence at 4 years of age. The typical age range is 2 to 11 years of age, but Henoch-Schonlein purpura may occur in adults. Henoch-Schonlein purpura is seen in association with group A streptococci, mycoplasma, food reactions, insect bites, and drug allergies.¹ The American College of Rheumatology criteria for Henoch-Schonlein purpura are: age less than or equal to 20 years at disease onset, palpable purpura, acute abdominal pain, and biopsy showing granulocytes in the walls of small arterioles or venules.³ The presence of two or more of these criteria allows the clinician to distinguish Henoch-Schonlein purpura from other forms of vasculitis with a sensitivity of 89% and a specificity of 88%. Our patient met two of these criteria and a biopsy was not necessary in the diagnosis or management of this case.

Treatment

The patient was treated with ibuprofen suspension; oral corticosteroids are generally not given unless abdominal



Figure 5 Lesions resolving

symptoms are severe.¹ Three days later, our patient was no longer complaining of leg pain and was able to walk without any limping. The rash was resolving and the child was happy and playful. She was eating well and never developed any gastrointestinal symptoms.

Figure 5 shows the smiling face of our patient with the rash 90% resolved. A repeat urinalysis showed no blood and only trace protein. Two weeks later, a final urinalysis was normal. The rash and joint symptoms resolved completely.

References

- 1 Kraft DM, Mckee D, Scott C. Henoch-Schonlein purpura: a review. *Am Fam Physician* 1998 Aug;58(2):405-408, 411.
- 2 Szer IS. Henoch-Schonlein purpura. In: Klippel JH, Dieppe E, editors. *Rheumatology*, 2nd ed. Philadelphia: Mosby, 1998:7:28;1-4.
- 3 Mills JA, Michel BA, Bloch DA, et al. The American College of Rheumatology 1990 criteria for the classification of Henoch-Schonlein purpura. *Arthritis Rheum* 1990 Aug;33(8):1114-1121.

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